

### **Remarks**

Applicants would like to thank the examiner for the review of the present application.

### **In the Claims**

Claims 1-5, 8, 12, 13, 15, 18-20, 24-32, 36, 49, 53 and 93 are currently pending in the application. As discussed in greater detail below, Applicants have amended claims 1, 4, 25, 27, 28, 29, 31 and 36. Claims 5 and 93 has been canceled. No new matter has been added.

### **In the Specification**

Applicants have amended paragraph 0001 found on page 1, lines 4-9 of the current specification to reflect the updated status of the patent applications indicated. Specifically, the Serial No. for Patent Application number 60/518, 782, filed on November 10, 2003, has been added.

### **Claim Objections**

The Office action objects to claims 20, 27-29, 31 and 93 as being dependent on a rejected base claim. However, the Office action states that these claims would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Following the Examiner's suggestion, Applicants have amended claims 27, 28, 29, 31 and 36 to overcome the Examiner's objection. In particular, with respect to the objection to claim 27, Applicants have amended claim 27 to include all of the limitations of claims 25, 26 and 27. With respect to the objection to claim 28, Applicants have amended claim 28 to include all of the limitations of claims 25, 26 and 28. With respect to the objection to claim 29, Applicants have amended claim 29 to include all of the limitations of claims 25, 26, 28 and 29. With respect to the objection to claim 31, Applicants have amended claim 31 to include all of the limitations of claims 25, 30 and 31. Finally, with respect to the objection to claim 93, Applicants have amended claim 36 to include all of the limitations of claim 93.

Applicants believes these amendments have overcome the Office's objection with respect to claims 27-29, 31 and 93 and Applicants believes that pending claims 27-29, 31 and 36 are in condition for allowance. Further, all claims dependent from amended claims 27-29 and 36 are also allowable as dependent claims from an allowable base claim. Thus, Applicants believes

claims 26-32 and claim 36 are allowable and respectfully requests the Examiner withdraw the objection to these claims.

**Claim Rejections – 35 USC 112**

The Office action rejected claims 1-5, 8, 12-13, 15, 18-20, 24-32, 36, 49, 53 and 93 under 35 USC §112, first paragraph, as failing to comply with the written description requirement. The Office action states that the claimed “evaporative condenser” coupled to the input for transforming the liquid to vapor and for transforming compressed vapor into a distilled liquid product” recited in claims 1, 25 and 36 is nowhere in the specification as originally filed. Applicants respectfully disagree.

Applicants respectfully submit that the evaporative condenser is described and shown in the original specification. For example, one embodiment is described at least on page 22, lines 15-17 and page 23 lines 8-26. The evaporator condenser includes a core which may include multiple parallel tubes 49 having head manifold openings 56 to allow core tubes 49 to communicate with the head 300, and having sump manifold openings 55 to allow tubes to communicate with sump 500. “Core tubes 49 are the heat exchange surface through which the latent heat of evaporation is transferred in the evaporation/condensation cycle. The rate at which heat can be exchanged between the condensing stem, outside the tubes, and the evaporating water, inside the tubes, is a key factor in output rate and efficiency.” See original specification page 22 lines 22-25 and FIG. 14A.

Thus, the evaporator condenser allows an evaporator/condenser “cycle”, but the structure itself is a combination evaporator and condenser. Thus, to clarify in response to the Examiner’s comments with respect to the term “evaporator/condenser”, the term does indeed refer to “and/or”, as the structure, e.g., in one embodiment, 600 in FIG. 14A, is both the evaporator and the condenser. Hence the claim term “evaporator condenser” refers to the structure that is both an evaporator and a condenser.

Additional description of the evaporator condenser can be found in the specification. Applicants believe they have satisfied the written description requirement pursuant to 35 USC §112, first paragraph, and as such, respectfully request the rejection under 35 USC §112, first paragraph be withdrawn.

**Rejections under 35 USC §103**

The Office action rejects claims 1-5, 8, 12-13, 15, 18, 24, 36 and 53 under 35 USC §103(a) as being unpatentable over GB 1211236 ("GB '236") or U.S. Patent 3,956,072 to Huse ("Huse") in view of U.S. Patent 1,668,532 to Stewart ("Stewart") and U.S. Patent 5,340,443 to Heinio et al ("Heinio"). The Applicants respectfully disagree.

Applicants draw the Examiner's attention to amendments to claims 1 and 36 and also, to the cancellation of claim 5. With respect to claim 5, Applicants submits the cancellation of this claim has made the rejection of this claim moot and respectfully requests the withdrawal of the rejection of claim 5.

With respect to claim 36, as discussed in greater detail above, Applicants have amended claim 36 to include the limitations of claim 93, and thus, respectfully submits that claim 36 is in condition for allowance. As claim 53 depends from claim 36, claim 53 is also allowable as a dependent claim from an allowable base claim. Thus, as Applicants have shown claims 36 and 53 are allowable, Applicants request the withdrawal of the rejection of these claims under 35 USC §103(a).

With respect to claim 1, Applicants have amended this claim to include the limitations previously found in claim 5. Specifically, claim 1 has been amended to include the limitation that the "evaporative condenser comprising a plurality of parallel core evaporator tubes, each tube having a first open end in communication with a sump and a second open end in communication with a head chamber". Neither GB '236 nor Huse disclose, amongst other elements, an evaporative condenser comprising a plurality of parallel core evaporator tubes, each tube having a first open end in communication with a sump and a second open end in communication with a head chamber. Further, as neither Stewart nor Heinio disclose an evaporative condenser comprising a plurality of parallel core evaporator tubes, combining these references with GB '236 or Huse would not yield the claimed system.

Specifically, the plurality of parallel core evaporator tubes, as claimed, include a first open end in communication with a sump and a second open end in communication with a head chamber. These limitations are not disclosed, taught or suggested in the GB '236 reference nor by Huse, nor disclosed, suggested or taught by Stewart or Heinio. Thus, Applicants have shown claim 1 is allowable over the rejections under 35 USC §103(a) and requests the withdrawal of the

rejection of claim 1, as well as all claims dependent from claim 1, as those claims are allowable as dependant claims from an allowable base claim.

The Office action rejects claims 19, 25-26, 30 and 32 under 35 USC §103(a) as being unpatentable over GB 1211236 ("GB '236") or U.S. Patent 3,956,072 to Huse ("Huse") as modified by U.S. Patent 1,668,532 to Stewart ("Stewart") and U.S. Patent 5,340,443 to Heinio et al ("Heinio") as applied to claims 1-5, 8, 12-13, 15, 18, 24, 36, and 53 and further in view of U.S. Patent 5,667,683 to Benian and U.S. Patent 4,045,293 to Cooksley. The Applicants respectfully disagree.

Applicants draw the Examiner's attention to the amendment to claim 25. Specifically, claim 25 has been amended to include the limitation that the "evaporative condenser comprising a plurality of parallel core evaporator tubes, each tube having a first open end in communication with a sump and a second open end in communication with a head chamber". Neither GB '236 nor Huse disclose, amongst other elements, an evaporative condenser comprising a plurality of parallel core evaporator tubes, each tube having a first open end in communication with a sump and a second open end in communication with a head chamber. Further, as neither Stewart nor Heinio disclose an evaporative condenser comprising a plurality of parallel core evaporator tubes, combining these references with GB '236 or Huse would not yield the claimed system.

Specifically, the plurality of parallel core evaporator tubes, as claimed, include a first open end in communication with a sump and a second open end in communication with a head chamber. These limitations are not disclosed, taught or suggested in the GB '236 reference nor by Huse, nor disclosed, suggested or taught by Stewart or Heinio. Thus, Applicants have shown claim 25 is allowable over the rejections under 35 USC §103(a) and requests the withdrawal of the rejection of claim 25, as well as claims 26, 30 and 32 as claims dependent from claim 25, as those claims are allowable as dependant claims from an allowable base claim.

Also, as Applicants have shown claim 1 to be allowable (see remarks above), claim 19 is also allowable.

The Office action rejects claim 49 under 35 USC §103(a) as being unpatentable over GB 1211236 ("GB '236") or U.S. Patent 3,956,072 to Huse ("Huse") as modified by U.S. Patent 1,668,532 to Stewart ("Stewart") and U.S. Patent 5,340,443 to Heinio et al ("Heinio") as applied to claims 1-5, 8, 12-13, 15, 18, 24, 36, and 53 and further in view of U.S. Patent 3,603,082 to Sneed or U.S. Patent 5,761,903 to Straka. The Applicants respectfully disagree. As

Applicants have amended claim 36 to include the limitations of claim 93, as discussed above. Applicants believe claim 36 is in condition for allowance. As claim 49 is a dependent claim of claim 36, Applicants believe claim 49 is also in condition for allowance.

For these reasons and others, some of which are discussed above, Applicants have shown that pending claims 1-4, 8, 12, 13, 15, 18-20, 24-32, 36, 49 and 53 are allowable, and thus, requests that the Examiner withdraw the rejections of claims 1-4, 8, 12, 13, 15, 18-20, 24-32, 36, 49 and 53 over 35 USC §103(a).

### **Conclusion**

For the foregoing reasons all of the claims of the present invention are patentable over the art of record. It is believed that all of the claim rejections have been addressed and that the application is now in condition for allowance. Reconsideration of the claims and issuance of a notice of allowance are respectfully requested. If any matter arises which may expedite issuance of a notice of allowance, the Examiner is requested to call the undersigned, at the telephone number given below.

Applicants hereby petition for a three-month extension of time. Applicants request that the associated extension fee be charged to Deposit Account No. 50-4383. Applicants also request that any other fee required for timely consideration of this application be charged to Deposit Account No. 50-4383.

Date: July 10, 2008

Respectfully submitted,

/Michelle Saquet Temple/

Michelle Saquet Temple  
Registration No. 48,834  
Attorney for Applicants

DEKA Research & Development Corp.  
340 Commercial Street  
Manchester, NH 03101-1129  
Tel: (603) 669-5139  
Fax: (603) 624-0573